

Expanding the Self through Service-Learning

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This article applies Aron and Aron's (1986) self-expansion model to the service-learning context. The self-expansion model proposes a motivational framework for understanding why individuals are motivated to engage in service-learning opportunities that allow for meaningful social interaction. Using a survey design, this study confirms hypotheses regarding: (a) self-expansion as an underlying motivation for service-learning for both service-learner and non-service-learner samples and (b) the relevance of the model for predicting general interest in service and a service-learning course for non-service-learners. Suggestions are provided for continued study of the self-expansion model in service-learning research.

In the field of intergroup relations, researchers have devoted decades of attention to the reasons why groups fear, avoid, and discriminate against one another (e.g., Allport, 1954; Sherif, 1970; Stephan & Stephan, 1984; Tajfel & Turner, 1979). Service-learning, with its potential to put students in contact with groups with which they would not likely otherwise interact, offers a more hopeful context for studying relationships between members of different social groups. Some service-learning practitioners argue it is precisely these meaningful intergroup interactions that lead to the numerous positive outcomes for students who participate in service-learning (Bringle & Kremer, 1993; Erikson & O'Connor, 2000; Jacoby, 1996). For example, McCarthy (1996) argues that without interactions with diverse others, "students' perceptions about social problems are less likely to change, little learning occurs, and expectations for continued active involvement are limited" (p. 116). This focus on intergroup contact as a key mediator of positive outcomes not only provides an intriguing and potentially important new conceptualization of the service-learning experience, it also opens the door for the application for a number of relevant social psychological theories to the study of service-learning.

One theoretical perspective of particular relevance to the service-learning context is Aron and Aron's (1986) self-expansion model (see also Aron & Aron, 1996; Aron et al., in press; Aron, Norman, & Aron, 1998). Originally developed in the context of close relationships, the self-expansion model proposes: (a) that human beings have a basic motivation to expand the self—that is, we are motivat-

ed to increase our sense of efficacy through experiences that help us acquire the resources necessary to achieve our goals and meet future challenges; and (b) that the process of self-expansion itself is affectively pleasant and the desire to experience this positive affect provides an additional motivation to seek opportunities for self-expansion.

Aron and Aron (1996) propose that when people form close relationships, they expand themselves and increase their potential efficacy by including aspects of the close other in the self. The inclusion of the other in the self allows an individual to benefit from the close other's resources and identities, and provides opportunities to view the world from the perspective of the other (Aron, Aron, Tudor, & Nelson, 1991). As a motivational theory, the model is unique in its proposal that self-expansion is a basic core motive, such as hunger or safety. Like other basic core motives, individuals will differ in their levels of self-expansion motivation and the choices they make to fulfill their expansion needs. While some individuals may have low self-expansion motivation, the theory proposes that they will still seek experiences, particularly relationships with others, to fulfill these needs. Whether high or low, self-expansion motives provide the "engine" driving our desire to form relationships with others, and the inclusion of the other in the self is one process by which self-expansion is achieved.

The inclusion of other in the self is thought to be a cognitive process involving an increasing overlap between the cognitive representations of the self and the other. The process is achieved through phases of expansion and integration (Aron, Norman, & Aron, 1998). Expansion involves the

new experiences that occur during relationship formation. Integration is the cognitive incorporation of these experiences into the existing self. Expansion produces positive affect as the sense of increased self-efficacy resulting from the acquisition of new resources, identities, and perspectives is highly rewarding and pleasurable. However, if expansion is too rapid, individuals may lack the cognitive resources needed to integrate these experiences into the self. Therefore, a mismatch between the rate of expansion and the rate of integration can lead to feelings of stress and burn-out (Aron, Norman, & Aron, 1998).

Thus, this model proposes that the positive affect usually associated with the formation and development of close relationships can, in part, be traced to the increased efficacy and the access to new perspectives, identities, and resources that result from including the other in the self (Aron & Aron, 1996). One implication of the self-expansion model for the case of service-learning contact is that individuals may be motivated to participate in service, in part, because of the self-expansion possibilities it provides. When a potential relationship partner belongs to an outgroup, as is often the case in the service-learning context, this person may be seen to hold a number of perspectives and identities not presently available to the individual. That is, members of an outgroup may provide an especially appealing opportunity for self-expansion (Wright, Aron, & Tropp, 2002; Wright, Brody, & Aron, *in press*). Thus, this model of interpersonal relations, while not denying the increased additional challenges and potential problems associated with the formation and development of cross-group interpersonal relationships, also proposes that these types of relationships may be especially appealing for the opportunity for self-expansion they provide.

Unlike most models of intergroup relations, which focus on the underlying psychological process that lead us to fear, avoid, and even mistreat members of other groups (Allport, 1954; Sherif, 1970; Stephan & Stephan, 1984; Tajfel & Turner, 1979), self-expansion proposes that there may also be an opponent process working to drive us toward outgroup members. Thus, self-expansion may represent an important aspect of the motivation that pushes some students to actively seek the opportunities to interact with outgroup others who are very often an integral part of service-learning experiences. From an intergroup relations perspective, this approach represents an important shift in thinking that may help explain how service-learning fulfills self-expansion needs. The theory also explains why some individuals may not be motivated to engage in the types of experiences associated with service-

learning. For example, individuals who are “maximally expanded” through intense, romantic relationships and/or many new experiences at college (clubs, courses, friends) may not be highly motivated to begin new relationships with outgroup others. The challenge of incorporating multiple new and different identities and perspectives for the “maximally expanded” individual may be more overwhelming than exciting in this case.

When cross-group relationships do form, they can have powerful effects for intergroup relations. Including the “outgroup other” in the self can lead individuals to think and feel more in line with the outgroup’s perspective because the outgroup is now much more self-relevant. When members of one group begin to understand and accept the other group’s positions and perspectives, the lines of difference and boundaries that divide the groups may become less salient (Brewer & Miller, 1984). In this way, the self-expansion model explains underlying psychological processes involved in the popular concept of “broadening one’s horizons” during the service-learning experience.

Service-learning provides students with a rare opportunity to develop relationships with members of outgroups whom they might not otherwise meet in their everyday lives. This type of intergroup contact can lead students to include aspects of the outgroup other in the self, and thus gain access to identities and perspectives previously unknown to them (Wright, Aron, & Tropp, 2002). The focus on social interaction and the development of meaningful relationships as a key feature of the self-expansion model makes this perspective very consistent with many of those who champion service-learning as a way to deepen understanding of relevant course concepts and increase positive learning outcomes (for a review see Eyler, Giles, Gray, & Stenson, 2001).

Finally, the self-expansion model also accounts for the possibility that some students may have a negative service experience. The theory proposes that periods of rapid expansion must be complemented with periods of integration, during which the new aspects of the self are incorporated in the existing self representations. If this integration does not take place, continued rapid expansion can lead to feelings of being overwhelmed, confused, frustrated, and “burned out.” Thus, without adequate reflection on their service experience, students may experience negative emotions associated with too-rapid expansion, resulting in a failure to experience the positive outcomes that can accompany service-learning contact.

For individuals engaged in service with outgroups, the right balance of expansion and integration is key. When reflection is part of the service

experience, individuals must process and make sense of the differences between self and other. The connection between reflection and self-expansion processes provides a bridge for discussions between volunteering, community service, and service-learning. For many practitioners (Sigmon, 1996; Vogelsang & Astin, 2000), the duration of the service—as well as the degree and quality of reflection—distinguish service-learning from other service experiences. However, while the processes of expansion and integration may best describe what happens in service-learning, self-expansion theory does not necessarily predict different motivations for those seeking volunteer, community service, or service-learning experiences. Self-expansion theory would predict that any individual engaging in service is doing so, in part, to fulfill self-expansion needs. From a self-expansion standpoint, initial motivation for volunteering, community service, and service-learning may be similar or even identical, but the varying degrees of reflection associated with each would explain different outcomes associated with these different categories of service. Thus, self-expansion theory's predictions about motivation apply to a wide-range of service experiences.

Connections with Other Psychological Models of Motivations for Service

Much of the literature on motivations for service focuses on egoistic (Baumann, Cialdini, & Kendrick, 1981; Cialdini et al., 1987) or altruistic (Batson, 1990) motives. Egoistic motivations involve selfish concerns such as feeling good or garnering praise from others, while altruistic concerns focus on other's welfare. The self-expansion model complements egoistic and altruistic approaches to service participation by proposing a framework that incorporates self-directed and other-oriented motivations. Expanding the self by definition involves a focus on the needs of the self. However, as inclusion of the other in the self begins, the needs of the other become the needs of the self. We begin to treat the other as we treat the self, for example, by generously sharing resources, feeling empathy for their troubles, taking pride in their successes, defending them against criticism, etc. Thus, the inclusion of the other in the self leads directly to an altruistic orientation (see Aron et al., in press; Cialdini, Brown, Lewis, Luce, & Neuberg, 1997).

Other motivational research has focused on how service experiences can serve particular psychological functions for individuals. The types of service opportunities are diverse, and this functional approach suggests that the motivations underlying service are also diverse (Clary et al., 1998). Clary

et al. identified six independent motivational factors influencing individuals to engage in service: (a) values, (b) understanding, (c) career, (d) social, (e) protective, and (f) enhancement. Service meets the values function by allowing individuals to express their beliefs through action. The second motivation, understanding, is the need for individuals to learn about themselves and others through experience. Individuals may also participate in service to acquire training and skills necessary to achieve future career aspirations. The social function allows individuals to adhere to the social norms of valued groups with whom they identify. Another motivation for service allows individuals to address personal issues and protect themselves from recognizing potentially negative aspects of their selves. Finally, the enhancement function allows individuals participating in service activities to focus on their personal growth and develop feelings of esteem and worth.

From a broader perspective, it appears that each of Clary et al.'s (1998) functional motivations might be at least partially determined by a more basic motivation: the desire to expand the self. According to this perspective, the functional motives identified by Clary et al. may be driven, in part, by a deeper desire to increase one's sense of self-efficacy and ultimately, to expand the self. While each of the motives is associated with the self and thus relate to the self-expansion model, some functions such as understanding and enhancement may be particularly relevant. For example, by serving the understanding function, service-learning may also serve an underlying expansion motive by giving individuals an opportunity to gain from the perspectives, identities, and resources of the people with which they will meet and interact in their service-learning agency. Indeed, as research with college students indicates (Clary & Snyder, 1999), the high ordinal ranking of the values, understanding, and enhancement functions may reflect the underlying need for expansion experiences. Individuals might perceive service as medium for achieving these efficacy-related goals and thus, choose to engage in outgroup contact through service.

The Current Study

Focusing on the role of intergroup contact in service-learning makes numerous social psychological theories relevant, including Aron and Aron's (1986) self-expansion model. Applying this theory to the service-learning context has a number of important implications, one of which is a novel perspective on the motivation that underlies both the initial engagement in, and the continued com-

mitment to, service-learning.

The current questionnaire study explored the self-expansion motive, by considering its relationship with other previously considered motives, and by investigating its potential for predicting initial interest in service-learning and volunteer opportunities. The questionnaire included scales tapping each of Clary et al.'s (1998) six functional motivations, and a newly developed self-expansion motivation scale adapted from Lewandowski and Aron's (2002) self-expansion scale. The primary model tested (see Figure 1) represents the self-expansion motive as an underlying causal factor that, in part, produces each of Clary et al.'s other six more specific functional motives. To test the model's relevance in both service-learning and non-service-learning samples, two samples were tested. The first is a group of students not currently involved in a service-learning experience (non-service-learners). Here, the scales tap motives for considering and pursuing potential service-learning opportunities. The second sample is a group of students already engaged in a service-learning program (service-learners). In this case, the scales measure the motives that sustain interest and commitment to a service-learning experience. Because the primary goal of the two samples is replication, comparisons across samples will not be addressed.

Self-expansion will also be examined as a predictor of interest in service participation among the non-

service-learner sample. Understanding the potential predictors of interest in service (both general interest and interest in taking a service course) is particularly useful for practitioners designing diverse types of service programs. In addition, linking the self-expansion motive to interest in service could be important for understanding how the motive relates to decisions to engage in outgroup contact.

Primary Hypotheses.

- Self-expansion will be an important motivator for service-learning participation.
- A model with the self-expansion motive as a causal factor underlying the six functions for service (Clary et al., 1998) will exhibit good structural fit.
- A structural model with the self-expansion motive as a causal factor underlying a general interest in service will exhibit good structural fit.
- Service-learner and non-service-learner samples will show similar patterns for each of the predicted models, as well as for relationships between service-learning motives.

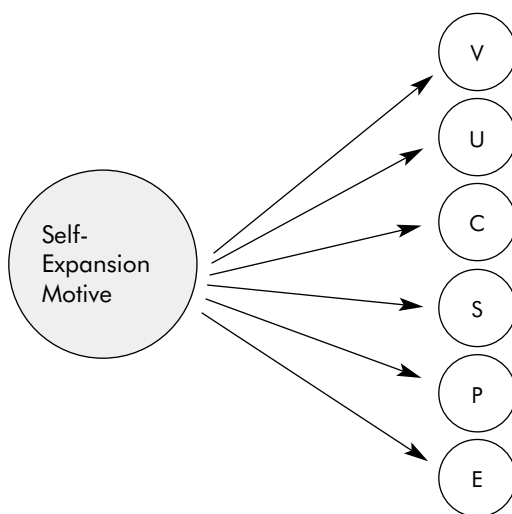
Methods

Participants

Sample 1: Non-Service-Learners. Respondents were 114 male and 163 female students ($N = 278$) at the University of California, Santa Cruz who participated in a study labeled "Motivations for Volunteering" as part of a research requirement for their lower-division psychology course. Participants ranged in age from 17 to 26, with an average age of 19 years. The ethnic background of the sample was 44.2% White/Caucasian, 24.5% Asian, 18.3% Latino/a or Chicana/o, 4.7% Middle Eastern, 1.4% Black, 0.7% Native American, and 6.1% other. To be included in the sample, participants indicated that they were not actively involved in any type of service activity (31 participants were excluded on this basis; final sample $N = 277$).

Sample 2: Active Service-Learners. Respondents were 182 women and 77 men ($N = 259$) who were participants in a large, well-established service-learning program at Boston College. The program, while not for academic credit, is very similar to course-based service-learning in many ways. The program involved: a rigorous application, interview, and selection process; training at the community agency; monthly reflection meetings discussing social justice topics and service experiences; two program-wide reflection retreats; a commissioning service; guest speakers; and a minimum of four hours each week at the same com-

Figure 1
Proposed Motivational Framework for Service-Learning Contact



Note. Self-expansion is predicted to be causally related to the six functions of volunteering (V = Values, U = Understanding, C = Career, S = Social, P = Protective, E = Enhancement).

Table 1
Items Adapted from Lewandowski & Aron (2002) Self-Expansion Questionnaire

Anchors: 1 = not at all important/accurate, 7 = extremely important/accurate
Volunteering increases my knowledge.
Volunteering gives me an opportunity to expand my own capabilities.
Volunteering helps me to expand my sense of the kind of person I am.
Volunteering with a group different than me gives me new experiences.

munity agency for one year. Participants ranged in age from 17 to 26, with an average age of 19.4. The ethnic background of the sample was 68.7% White/Caucasian, 5.0% Asian, 3.9% Latino/a or Chicana/o, 2.3% Middle Eastern, 1.2% Black, and 19.0% other.

Questionnaire

Participants provided their name, age, gender, and racial/ethnic background and were also asked if they were actively participating in service. Participants then completed 34 items relating to the functions of service participation. Thirty items were taken from Clary et al.’s (1998) Volunteer Function Inventory (VFI). As described in the introduction of this article, the VFI has six subscales (each including five items) that assess different functions of service participation: values, understanding, career, social, enhancement, and protective. Interspersed in the VFI were four items adapted from Lewandowski and Aron’s (2002) Self-Expansions Questionnaire (SEQ; see Table 1). In the non-service-learning sample only, participants responded to two additional checkbox items asking if they would be interested in learning more about volunteer opportunities in the Santa Cruz area (general interest in service) and whether they would be interested in a service-learning course for academic credit (interest in service-learning courses).

Procedure

Non-Service-Learner Sample. Groups of participants (up to 25) completed the survey, each at sep-

arate desks in a large lab room. As participants arrived, a research assistant confirmed their names and asked them to sit down. When all participants arrived, the researcher welcomed participants to the lab, indicated that the questionnaire concerned interest in volunteering and service, assured participants they did not need to have service experience, but if they did, that was also fine. She instructed participants to raise their hands if they had any questions about the survey items. When finished, participants turned in their questionnaires, were thanked, and dismissed.

Service-Learner Sample. A student leader who facilitated service-learning group meetings administered the questionnaire. Participants completed the questionnaire either during a group meeting or at home. If participants had any questions about particular items, they were instructed to contact the researcher via email.

Results

Scale Reliability. Seven scales (Protective, Values, Career, Social, Understanding, Enhancement, Self-Expansion) were created by averaging scale items. All scales demonstrated acceptable reliability for both the non-service-learner and service-learner samples (Protective $\alpha_{\text{non-serv}} = .82$, Protective $\alpha_{\text{service}} = .76$; Values $\alpha_{\text{non-serv}} = .78$, Values $\alpha_{\text{service}} = .82$; Career $\alpha_{\text{non-serv}} = .86$, Career $\alpha_{\text{service}} = .79$; Social $\alpha_{\text{non-serv}} = .87$, Social $\alpha_{\text{service}} = .86$; Understanding $\alpha_{\text{non-serv}} = .80$, Understanding $\alpha_{\text{service}} = .72$; Enhancement $\alpha_{\text{non-serv}} = .82$, Enhancement $\alpha_{\text{service}} = .82$;

Table 2
Correlation Matrix Displaying VFI Scales and Self-Expansion Motivation Scale for the Non-Service-Learner Sample

	Protect	Values	Career	Social	Understand	Enhance	Self-Exp
Protect	1.000	.303**	.272**	.408**	.417**	.695**	.496**
Values		1.000	.182**	.249**	.556**	.369**	.555**
Career			1.000	.325**	.491**	.331**	.438**
Social				1.000	.391**	.442**	.376**
Understand					1.000	.496**	.792**
Enhance						1.000	.510**
Self-Exp							1.000

**p < .01

Table 3
Correlation Matrix Displaying VFI Scales and Self-Expansion
Motivation Scale for the Service-Learner Sample.

Protect	Values	Career	Social	Understand	Enhance	Self-Exp
Protect	1.000	.149*	.417**	.416**	.343**	.657**
Values		1.000	.070	.179**	.534**	.133*
Career			1.000	.408**	.266**	.444**
Social				1.000	.230**	.424**
Understand					1.000	.363**
Enhance						1.000
Self-Exp						

1.000

* $p < .05$, ** $p < .001$

Self-expansion $\alpha_{\text{non-serv}} = .74$, Self-expansion $\alpha_{\text{service}} = .70$).

Preliminary Analyses. All seven scales correlated with each other at the .01 level for both samples (see Table 2 and Table 3).

To examine the relative importance of each of the seven motives and specifically to examine the relative strength of the self-expansion motive, scores for the seven motives were submitted to a one-way repeated measures ANOVA (separately for each sample). The result was a significant effect of motive for both the non-service-learner sample, $F(6, 272) = 245.67, p < .001$, and the service-learner sample, $F(6, 253) = 241.35, p < .001$. As Table 4 shows, self-expansion was among the most strongly endorsed motives, third in ordinal ranking for the non-service-learning sample and second in ordinal ranking for the service-learning sample.

Testing the Relationship Between Functions of Service and Self-expansion Motive. Confirmatory Factor Analysis using EQS software was used to test the model predicting a causal relationship between self-expansion and the VFI motives. For purposes of replication across diverse samples, separate but identical models were used to test each of the two samples. In the models, the VFI motives

were represented as six latent factors, each with five items as indicators, and self-expansion was represented as a latent factor with four indicators. Causal arrows were drawn from the self-expansion to each of the six VFI factors.

Consistent with structural equation modeling conventions, the fit of the model can be evaluated by several criteria including the χ^2 ratio, Comparative Fit Index (CFI), Bollen Fit Index (BFI), Goodness of Fit Index (GFI), Standardized Root Mean Residual (SRMR), and Root Mean Square Error of Approximation (RMSEA). The goodness of fit of a particular model to the data is based on an interpretation of these indices. Conventions for interpreting good fit of a model are as follows: χ^2 ratio < 2 ; CFI, BFI, and GFI > 0.9 ; SRMR, RMSEA $\leq .10$ (Byrne, 2001; Ullman, 1996).

Additionally, the term “causal” is regularly used in the context of structural equation modeling techniques. Causal refers to the hypothesized causal relationships among the variables in a linear model. The approach measures the degree to which the model approximates the data, using the fit indices described previously. As with all correlational data, the term “causal” is used conditionally, but the benefit of this

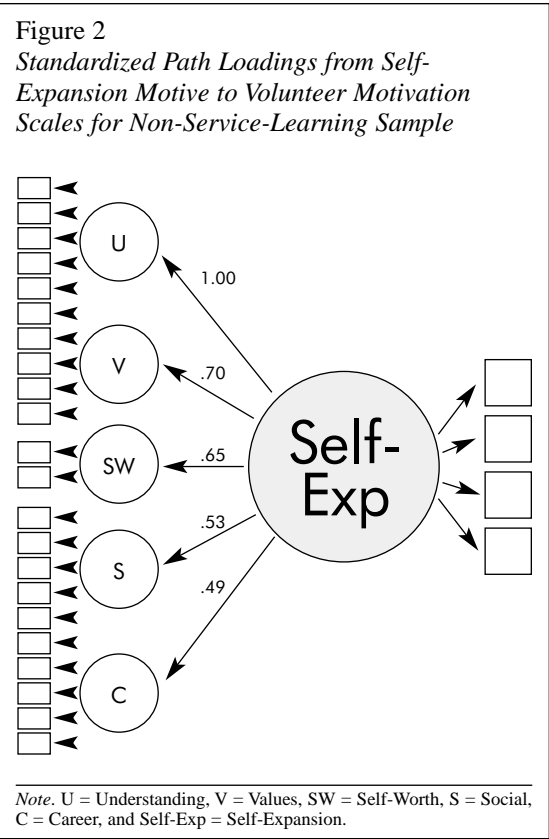
Table 4
Mean Values of Seven Service Motivations for Service-Learning and Non-Service-Learning Samples

	Non-service-learning sample*	Service-learning sample**
Protective	3.24	3.46
Values	5.63	6.15
Career	4.47	3.30
Social	3.02	3.58
Understanding	5.43	5.71
Enhancement	4.40	4.07
Self-expansion	5.32	5.73

Note. Scores are on a 1-7 scale. Higher scores indicate endorsement of the psychological function (e.g., high self-expansion score means participants indicated high self-expansion motive).

*Pairwise comparisons for the non-service-learning sample showed significant differences between all possible pairwise comparisons at $p < .05$ with the following exceptions: Protective vs. Social; Career vs. Enhancement; Understanding vs. Self-expansion. Bonferroni adjustment made for multiple comparisons.

**Pairwise comparisons for the service-learning sample showed significant differences between all possible pairwise comparisons at $p < .05$ with the following exceptions: Protective vs. Career; Protective vs. Social; Understanding vs. Self-expansion. Bonferroni adjustment made for multiple comparisons.



technique is that it allows for test models that do include directional paths between variables.

For both the non-service-learner and the service-learner samples, preliminary tests of the models showed that the Protective and Enhancement factors were very highly correlated. Thus, for purposes of data reduction and parsimony, models combining the Protective and Enhancement into a single factor were tested. This combined latent factor was called Self-Worth to reflect the ego-protective and self-esteem aspects characterized by the Protective and Enhancement subscales. This new Self-Worth factor used the mean values of the Protective and Enhancement scales as its two indicators. For non-service sample, the overall fit of the more parsimonious model was good (χ^2 ratio = 2.81, $p < .001$, Comparative Fit Index (CFI) = 0.86, Bollen (IFI) Fit Index = 0.86, Lisrel GFI = 0.82, Standardized RMR = 0.08, and Root Mean Square Error of Approximation = 0.08). Figure 2 displays the model for the non-service-learner sample with standardized parameter values indicated.

For the service-learner sample, the overall fit of the model was also good (χ^2 ratio = 2.14, $p < .0001$, Comparative Fit Index (CFI) = 0.85, Bollen (IFI) Fix Index = 0.85, Lisrel GFI = 0.80, Standardized RMR = 0.10, and Root Mean Square Error of

Approximation = 0.08). Figure 3 displays the tested model for the service-learner sample with standardized parameter values indicated.

Structural Models Predicting Interest In Service Participation. Confirmatory Factor Analysis using EQS software was used to test two models predicting a causal relationship between self-expansion motives and general interest in service (see Figure 4), and between self-expansion motives and interest in service-learning courses (see Figure 5) using the non-service-learner sample. In the first model, self-expansion motive was represented as a latent factor with four item indicators and general interest in service was a measured outcome variable. The overall model had very good fit (χ^2 ratio = 3.40, $p < 0.05$), Comparative Fit Index (CFI) = 0.94, Bollen (IFI) Fix Index = 0.95, Lisrel GFI = 0.97, Standardized RMR = 0.05, and Root Mean Square Error of Approximation = 0.11). The standardized path loading between self-expansion motive and the interest variable was 0.40, suggesting a strong positive relationship between self-expansion motive and the level of interest in local service opportunities.

In the second model (see Figure 5), investigating the causal relationship between self-expansion motive and interest in a service course self-expansion motive was a latent factor with four item indi-

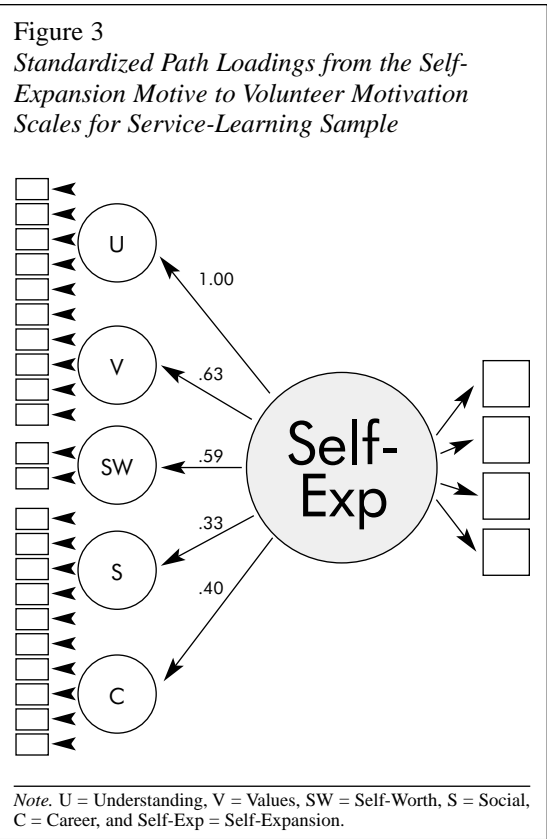
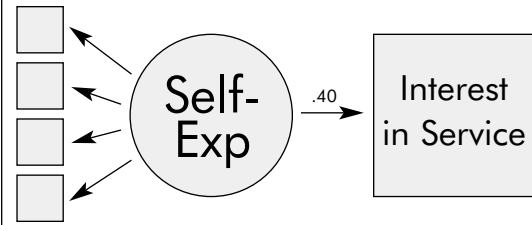


Figure 4
Self-Expansion Motive as a Causal Predictor of General Interest in Service Participation (Standardized Path Loading)



cators and interest in a service course was a measured outcome variable. The overall model had very good fit (χ^2 ratio = 2.50, $p < 0.05$, Comparative Fit Index = 0.96, Bollen Fix Index = 0.96, Lisrel GFI = 0.98, Standardized RMR = 0.04, and Root Mean Square Error of Approximation = 0.08). The standardized path loading between the self-expansion motive and interest in a service course was 0.36, indicating a strong positive relationship between self-expansion motive and interest in taking a service course.

Discussion

Self-Expansion and Functions of Service

The correlations indicated that self-expansion is correlated with, but unique from, the other motivations (see Tables 2 & 3). Inspection of the mean endorsement of the self-expansion motives show that both active service-learners and non-service-learners see self-expansion as an important motivation, with both groups endorsing this motive with a mean of greater than five on a seven-point scale. Similarly, the ordinal ranking of self-expansion motivation show that both groups of participants consider self-expansion to be among the most important motivators for service (see Table 4). These descriptive data lend support for the first

hypothesis predicting self-expansion as an important motivator for service participation.

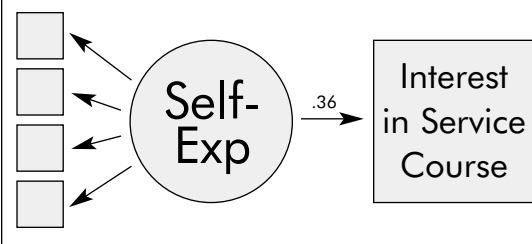
Structural model analyses found reasonably good fit for models testing self-expansion as a causal latent factor underlying the other documented functions of service, supporting our second hypothesis that self-expansion represents a more general motive that, in part, determines and produces the other more specific reasons for interest in, and continued participation in service-learning. The replication of this model across two different samples—one of active service-learners and another of non-service-learners—is an important step in demonstrating the robustness of the causal connection between self-expansion motives and other forms of motivation. There appears to be good evidence that self-expansion is an important motivation which may play a particularly important role as a motivator for service-learning.

Predicting Interest in Service

Non-active service-learners were asked whether they were interested in local service opportunities and in a separate item, whether they were interested in taking a credit-bearing service-learning course. The structural models predicting self-expansion motives as a causal latent factor predicting general interest in service and the model predicting interest in service-learning courses both had very good fit indices and indicated a strong relationship between self-expansion and interest. In a practical term, these findings mean that administrators might be able to use the relatively simple (four-item) measure of self-expansion motivation to gauge interest in service involvement. Service-learning practitioners could target students with high self-expansion motives as likely candidates for service involvement. Targeting a smaller sample of students could result in more effective, and less costly recruitment efforts.

Finally, we return to the initial point made in the introduction of this article that in many cases service-learning involves interactions and contact with members of other groups. Most of the work on the self-expansion motive has focused on how people seek to satisfy this motive by forming relationships with others that allow for the inclusion of those others in the self (Aron et al., in press). If self-expansion represents an important motivation for engagement in service-learning and a common means of satisfying this motive is to seek out others who can be included in the self, it seems reasonable that the opportunity to interact and form meaningful relationships with others may well represent a significant aspect of the motivation to pursue and to continue service-learning experiences.

Figure 5
Causal Model Between Self-Expansion Motive and Interest in a Service-Learning Course (Standardized Path Loading)



In addition, it may well be that the sometimes large and meaningful differences between the students and group members being served, while certainly a potential source of initial anxiety (see Stephan & Stephan, 1985), may also be a source of great interest, as it is these differences that provide the basis for the greatest amount of self-expansion if these outgroup others are included in the self.

The functional approach (Clary et al., 1998) suggests that the degree to which each individual functional motive is met determines satisfaction with the service-learning experience. This approach to service motivation makes no explicit connection to social interaction. Self-expansion theory suggests that fulfilling particular goals will not necessarily lead to satisfaction. Rather, these goals should be met in a context where significant social interaction and the development of meaningful social relations are possible. Placements that meet particular functions without social interaction may be less satisfying than placements also including opportunity for social relations, as the later context is more likely to meet the need for self-expansion that, in part, underlies these other goals. For example, answering phones at the food bank may be extremely valuable work that teaches important skills, involves learning about poverty, and meets several "functions" of service. However, an underlying need to include diverse others in the self may remain unmet in this type of placement and cause service-learners to feel relatively less satisfied with their experience, compared to those whose placements met the same functions but also involved social interaction.

It is important to recognize that, although structural equation models provide the best available tests of causal relations possible with cross-sectional data, these data remain correlational. Building on this foundation, future studies would need to employ experimental procedures to verify the causal relationship indicated in these data. For example, future studies could involve experimental manipulations of the salience and importance of self-expansion motives (see Wright, McLaughlin-Volpe, & Brody, 2003) and test the subsequent change in service motives. This might be accomplished through reflections and readings that emphasize personal growth, learning from others, and the personal benefits of gaining access to the resources, perspectives and identities of different groups. If self-expansion truly drives other motives for service, then reducing the salience of self-expansion motives would lead to muted levels of other service motives; raising the salience of self-expansion should lead to increased levels of other service motives. For service-learning practitioners

interested in increasing motivation either before or during service, the causal relationship suggested by this study could be useful. During reflection meetings, raising the salience of self-expansion motives could serve to interest or re-engage students in the service-learning experience. Similarly, future experimental research could manipulate the salience of, and/or opportunity for, self-expansion and record levels of willingness to participate in service-learning opportunities.

In addition, longitudinal field research designs can also be used to more convincingly test the proposed causal models of self-expansion as a direct cause of the other more specific motives, and of interest, participation, and long-term commitment to a service-learning experience. For example, one next step for this research would be to administer the four-item self-expansion scale to groups of incoming first-year students and follow their subsequent interest and degree of participation in available service-learning programs and courses. This type of research could also be used to test a number of potential mediators that have been proposed here. For example, multiple testing occasions could be used to determine the relationship between initial self-expansion motives and subsequent satisfaction with one's service-learning experience. Or, this design could be used to test whether the type of service-learning placement (social interaction vs. no social interaction) mediates the relationship between fulfillment of functional motives and satisfaction.

The present research takes some initial steps in bringing a social psychological theory of interpersonal and intergroup relations to bear on the question of motivation to engage in service-learning. Continued research is needed to test many of the specific questions that remain. However, the results provide evidence of an important role for self-expansion as a motive that may underpin other more specific functional motives for engaging in service-learning. In addition, it appears that, on its own, the strength of students' self-expansion motives may represent an important determinant of their interest in pursuing opportunities to participate in service.

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